

CLAIMS

[1] (Amended) A plasma processing apparatus (1) for applying a plasma process to a process target (W), comprising:

a process chamber (2) for applying a plasma process to said process target (W);

a mounting table (16), provided on a support table (15) provided in said process chamber (2), for mounting thereon said process target (W);

a process gas supply unit (4) for supplying a process gas for applying the plasma process to said process target (W) into said process chamber (2);

a plasma generation unit (5, 7) for generating plasma of the process gas supplied by said process gas supply unit (4) by applying a high-frequency voltage; and

a dike (18) for confining the plasma generated by said plasma generation unit (5, 7) in an area above said process target (W) mounted on said mounting table (16),

wherein said dike (18) comprises:

a conductive member (18a) formed of a conductor; and

a protruding portion (18c) formed to surround said support table (15) and said mounting table (16) and to be higher than a mounting surface of said mounting table (16), and

said conductive member (18a) is grounded.

[2] (Amended) The plasma processing apparatus (1) according to claim 1,

wherein said dike (18) further comprises an insulating member (18b) which covers said conductive member (18a) and electrically insulates between said conductive member (18a) and said mounting table (16).

[3] (Amended) The plasma processing apparatus (1) according to claim 1,

wherein said protruding portion (18c) of said dike (18) is formed to be higher than said process target (W) mounted on said mounting table (16), so as to surround the area above said process

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target (W).

[4] The plasma processing apparatus (1) according to claim 1,
wherein an interval between a top end of said dike (18) and an inner wall of said process
chamber (2) is 85 mm or smaller.

[5] The plasma processing apparatus according to claim 1, further comprising a